

Developing informed fishing communities in South Asia

Yugraj Singh Yadava, Director, Bay of Bengal Programme Inter-Governmental Organisation

The four south Asian nations of Bangladesh, India, Maldives and Sri Lanka are important players in the global fisheries arena. The contribution of the fisheries sector to their national economies is more than one per cent of their national GDPs. Fish and fish products are among the most heavily traded food commodities in the region. These nations are also members of a regional fisheries body, the Bay of Bengal Programme Inter-Governmental Organization (BOBP-IGO), previously known as the Bay of Bengal Programme (BOBP).

Located on the western and northern boundaries of the Bay of Bengal, these countries exploit the rich and diverse fisheries resources of the Bay. However, increasing human population, especially in India and Bangladesh, and reduced productivity of coastal fisheries through unsustainable fishing practices, habitat degradation, post-harvest losses, etc. threaten the livelihoods of millions of small-scale fishers in the region. In recent years, capture fisheries have either stagnated or seen only a small increase in terms of production, while aquaculture has continued to grow at a rapid rate. Further decline of fisheries would severely impact the livelihood security, food availability and national economies of these countries.

The total fisher population in these four countries is estimated at about 5.2 million, with about 69 per cent (3,574,704) in India

alone. The fisher community in this region is typical of many other parts of the developing world. They are mostly the poorest sections of society, residing in remote, inaccessible areas, mostly out of the reach of community development programmes such as education, health and sanitation, water supply, electricity, housing, etc. This exclusion from mainstream development considerably lowers their quality of life. The table below provides a comparative picture of the total fisher population and selected parameters on their education level in these four countries.

Activities aimed at educating fishing communities

The BOBP-IGO and its forerunner, the BOBP, have been working in these countries for more than three decades. In the initial years, the BOBP focused on increasing fish production through technology inputs. It also became clear during the earlier period of the BOBP in the region that there was a need for knowledge at all levels of the community. Thus, the programme also focused on education, training and awareness creation and implemented a variety of activities, which kept evolving with the changing times and needs of the community. Various education and awareness programmes of the

Countries	Bangladesh	India	Maldives	Sri Lanka
Fisher population	902,961 ¹	3,574,704 ²	13,980 ³	664,820 ⁴
Education level	About 9 per cent of fishers have basic education ⁵	57 per cent of the population is educated. However, only 51 per cent of educated fishers have primary level education ⁶	About 98 per cent of fishers have basic education ⁷	About 40 per cent of fishers have completed primary school education ⁸
Human Development Index in Education (2007) ⁹	0.543	0.612	0.771	0.759
Education Index (2007) ⁹	0.530	0.643	0.885	0.834
Public expenditure on education as percentage of total government expenditure (2000-2007) ⁹	14.2	10.7	15.0	NA



Image: E Amalore, BOBP

A link worker discusses health issues with fisherwomen in Bangladesh

BOBP and the BOBP-IGO contributed to the development of fisher communities in the region.

Non-formal education programme for children and adults

A non-formal education project (NFEP) for children of marine fishers was launched in 1983 in Orissa, India. The BOBP prepared a curriculum and some 120 booklets for children in these communities aged between six and 14. Around 20 non-formal centres were set up in four coastal districts of Orissa. The booklets were printed with funds provided by UNICEF. An important concept underlying their development was that they should integrate learning with life. The first pack of 36 booklets was designed to teach basic letters, words and numbers. The State Council of Education, Research and Training and the National Council of Education, Research and Training participated in the programme. The curriculum's main features were flexibility and adaptability to the learning needs of the community and it was designed to be closely related to local resources and opportunities. The BOBP's NFEP for children in fishing communities furthered the Government of India's nationwide scheme, Comprehensive Access to Primary Education, popularly known as CAPE.

From 1982 to 1985, the BOBP organized a first-of-its-kind NFEP for adult fishers in the state of Tamil Nadu, India. A package of learning materials, to be used in non-formal adult education (NFAE), was prepared for this community. The NFAE package included an animators' guide, a numeracy primer, a trainers' manual and supplementary readers. The trainers' manual and animators' guide sparked astonishing demand, not just from all parts of India, but worldwide – demonstrating the need for these publications. The most heartening index of the project's success is that it inspired an almost identical NFAE package for the rural population in general by the Government of India.

Using the airwaves to reach fishing communities

In poor, isolated communities, radio is often the only link to the outside world. The BOBP's work in promoting the use of radio for fishing communities has proved to be an effective way of reach-



Image: S Jayaraj, BOBP-IGO

Sri Lankan school children participate in the BOBP-IGO painting competition on 'Life after Tsunami'

ing large audiences.¹⁰ Launched in 1978, the fisherfolk radio programme in the Maldives is one of the oldest in the region. In the early nineties, the BOBP, in association with World Radio for Environment and Natural Resources (WREN) UK, trained the staff of the Voice of Maldives (VOM) and the Ministry of Fisheries and Agriculture, Government of Maldives and fine-tuned the programmes. In scattered island communities, radio programmes are immensely useful and also serve as a binding force. The VOM now produces a variety of radio programmes for the fisher community, including weather bulletins, technology updates, market and tuna fish price reports, music and religious discourses. The Maldivian experience is an excellent example of the use of radio in the fisheries sector.

Small-scale Sri Lankan fishers are neither avid readers nor fans of television. But they listen to the radio, whether out on the seas, repairing nets on the shore or relaxing with family at home. In January 1989, the Sri Lanka Broadcasting Corporation (SLBC) started a radio programme for fishers – a five-minute programme every week day (news and features, fish prices, music) and a 15-minute programme every Sunday (news and views, discussion, entertainment) in Sinhalese. The programme was prepared by a Fisherfolk Radio Unit set up by the Ministry of Fisheries and Aquatic Resources, with technical and material assistance from the BOBP and some funding assistance from the Norwegian Agency for Development Cooperation (NORAD). The programme has grown over the years and is a valuable source of information for fishers out at sea.

Similarly, radio is a useful medium of information for fishers in Bangladesh, where Bangladesh Betar, the national radio service provider, produces a variety of programmes for fishers and fish farmers. The Bangladeshi fishers out at sea stay tuned to their radio sets for weather bulletins, especially for information on



Image: S Jayaraj, BOBP-IGO

Colouring books help schoolchildren to critically examine their natural environments

cyclones, which often come without sufficient warning and are the cause of thousands of fatalities at sea every year. The BOBP-IGO has prepared jingles and snippets in the Bangla language on safety at sea to be broadcast through Bangladesh Betar.

Comic books as a medium of education

Of the several communication tools that the BOBP tried, the comic book format was one of the most successful. Its first comic book, *Our fish, our wealth*, cut across the barriers of sex and age and became highly popular. Published in 1992, the comic book promoted awareness of the mechanisms of fisheries management among small-scale fishers. Subsequently, comic books were also produced on the subjects of cleaner fishing harbours and good practices in shrimp farming, becoming instant hits.

Other communications tools, such as puppetry, folk theatre, street plays and video films, have been successfully used by the BOBP and the BOBP-IGO. The BOBP used video technology for training and information dissemination as early as 1985. Several video films prepared by the Programme are popular within and outside the region.

Catch 'em young

As sustainability implies that future resource users must be trained to take responsibility, the BOBP and later the BOBP-IGO undertook many programmes and activities aimed at fisher children. It was also considered important to make children aware, as early as possible, of the value of protecting the natural environment. In Maldives, a colouring/work book titled *Life on our reefs* was published for primary schoolchildren on the islands. The main purpose of this book was to encourage the children to:

- Critically examine their natural environment
- Learn about the impact of humans on the coral reefs
- Consider what could be done to help safeguard the future of coral reefs.

After the December 2004 Asian tsunami, which devastated the fisheries sector in India, Maldives and Sri Lanka, the BOBP-IGO in December



Image: S Jayaraj, BOBP-IGO

Disseminating knowledge – a sample of the publications of the Bay of Bengal Programme

2005 organized a painting competition for school children in the affected countries, with the objective of sensitizing the children to such natural calamities. The 2006 annual calendar of the BOBP-IGO featured some of the best paintings from the three countries. Several organizations partnered with the BOBP-IGO in this initiative. In 2009, a poster on cetaceans of the tropical Indian Ocean, printed by the BOBP-IGO, was distributed to all the schools in Maldives to create awareness among school children of the importance of cetaceans in ocean life. The poster was prepared in response to a request made by the Vice-President of Maldives.

Training women as link workers

Fisherwomen play a pivotal role in sustaining and developing the family. It has been observed that income earned by women is more likely to be spent on food and other basic needs than income earned by men. Consequently, it is recognized that an increase in women's income is more likely to improve family status than increased household income per se.

The BOBP implemented a project on activating fisherwomen for development through trained link workers in Tamil Nadu, India. The project aimed at providing fisherwomen with the required basic education and training to enable them to serve as links between village women and government officers. Several link workers were trained and worked for many years in their villages and surrounding areas. Women's self-help groups have been established in many fisher villages in Tamil Nadu thanks to these link workers.

Taking the Code to the grassroots

The Code of Conduct for Responsible Fisheries, or simply the Code,¹¹ is one of the best examples of collective effort in global fisheries. Signed by the members of



Images: S Jayaraj, BOBP-IGO

The Code of Conduct for Responsible Fisheries has gained wide acceptance and Indian fishermen can read the Code in their own languages

the Food and Agriculture Organization (FAO) of the United Nations in October 1995, the Code took many years, marathon effort, formidable expertise and substantial resources to develop. The Code is also an outcome of several contemporary global initiatives. It is elaborate and is directed at everyone concerned with conservation of fishery resources and management and development of fisheries. However, the main weakness of the Code springs partly from its strength. Its language is dry and legal and does not make for easy reading or comprehension.

To allow the Code to reach a critical mass of fisheries practitioners in its member countries, the BOBP and later the BOBP-IGO have undertaken several activities to popularize it and improve its dissemination. The most significant among these activities is the translation of the Code, its concise version and the technical guidelines into several Indian languages spoken in the coastal states of the country and also into the national languages of Bangladesh (Bangla), Maldives (Dhivehi) and Sri Lanka (Sinhala). Each vernacular version is printed in large numbers to allow for distribution to the stakeholders.

In addition, several workshops, seminars and interactive meetings with stakeholders have helped to communicate with fisher communities and stimulate debate and discussion about the meaning of the Code and the implementation of its technical guidelines. These interactions have thrown up innovative ideas on adaptation of the Code to meet the local needs of communities. It has also been suggested that the Code should be made a part of the school curriculum. A special syllabus or a supplementary school programme could be considered for coastal areas, with a focus on fisheries. The fundamentals of conservation, management and responsible fisheries could be taught in an interesting way. Since this is already being done in Maldives, that country's experience could be of interest to other countries in the region.

Communication the key to successful education

The BOBP and the BOBP-IGO have, over the years, found that communication can help improve the understanding of perceptions, world views and frameworks of logic. Appropriate awareness-building can

bridge differences by building new structures of learning on traditional foundations of knowledge.¹² In the course of developing communication tools for small-scale fishers, several lessons have emerged:

- The success of any programme for development of small-scale fisheries largely depends on the ability of fisheries agencies to inform, communicate with, motivate and mobilize fisher communities
- Fishers are aware of the dangers of overfishing, but they need education and orientation on resource depletion trends and patterns, fish behaviour, management methods and tools
- The connection between development and data/information is obvious, but a strong disconnect between the two characterizes fisheries in most developing countries
- Gaps in fisheries information should be plugged, to enable better analysis and decision-making
- Involving fishers in information gathering may lead to more reliable data
- Messages blended with popular forms of entertainment in vernacular languages reach audiences more rapidly than meetings and workshops.

The diverse initiatives undertaken by the BOBP and the BOBP-IGO show that education and awareness are fundamental tools for enterprise building among poor communities. Enterprise development requires education to instil knowledge, which does not necessarily lead to resolution of problems, but helps in promoting better understanding of the issues and also in finding solutions. Raised awareness leads to active local participation in the resource management process, which is a precursor to a participatory approach to fisheries management.